

# Block diagram

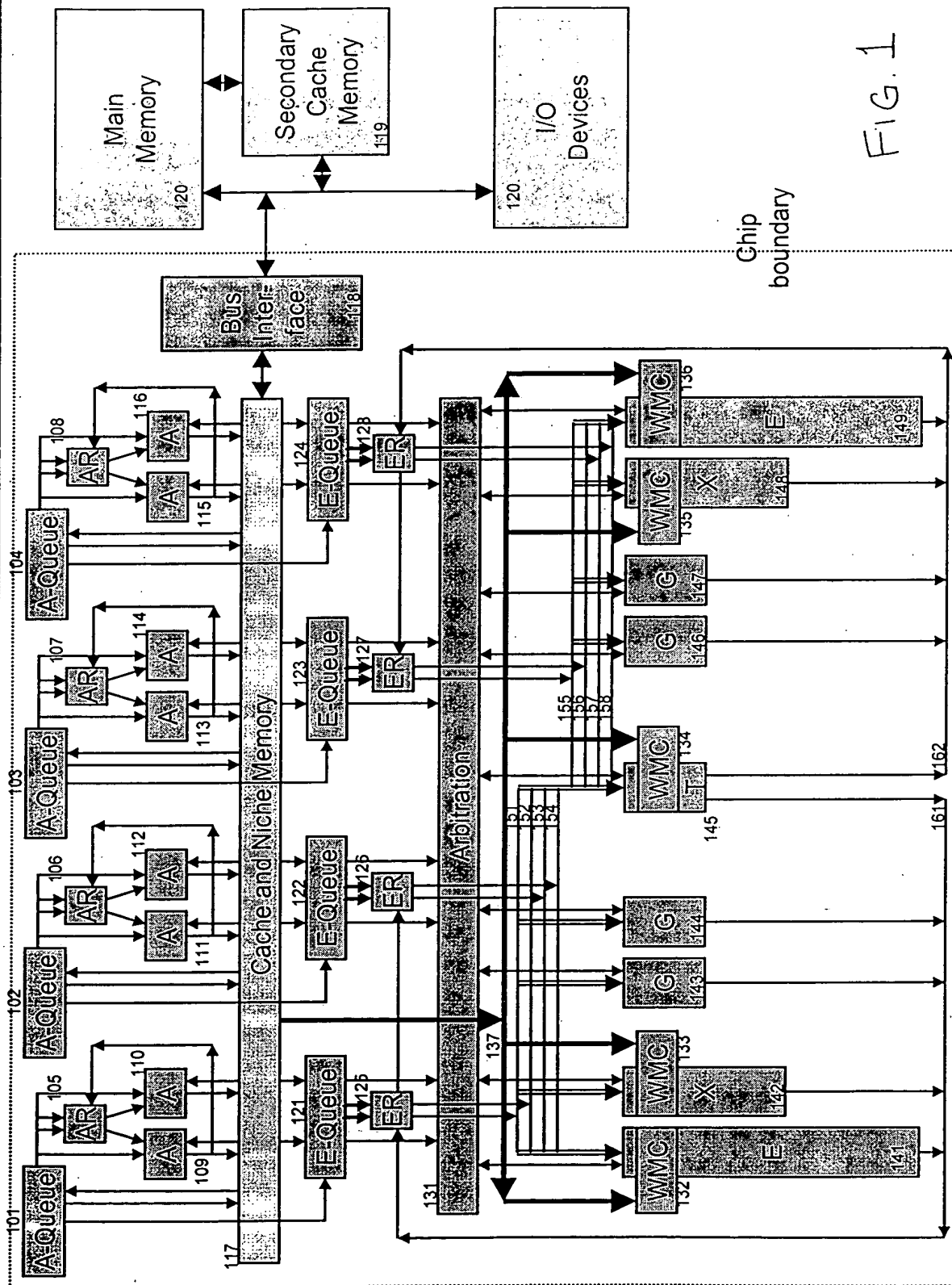


FIG. 1

# Wide multiply-matrix

$$\blacksquare \text{rd}_{128} = m[\text{rc}]_{(128 \times 64 / \text{size})} * \text{rb}_{128}$$

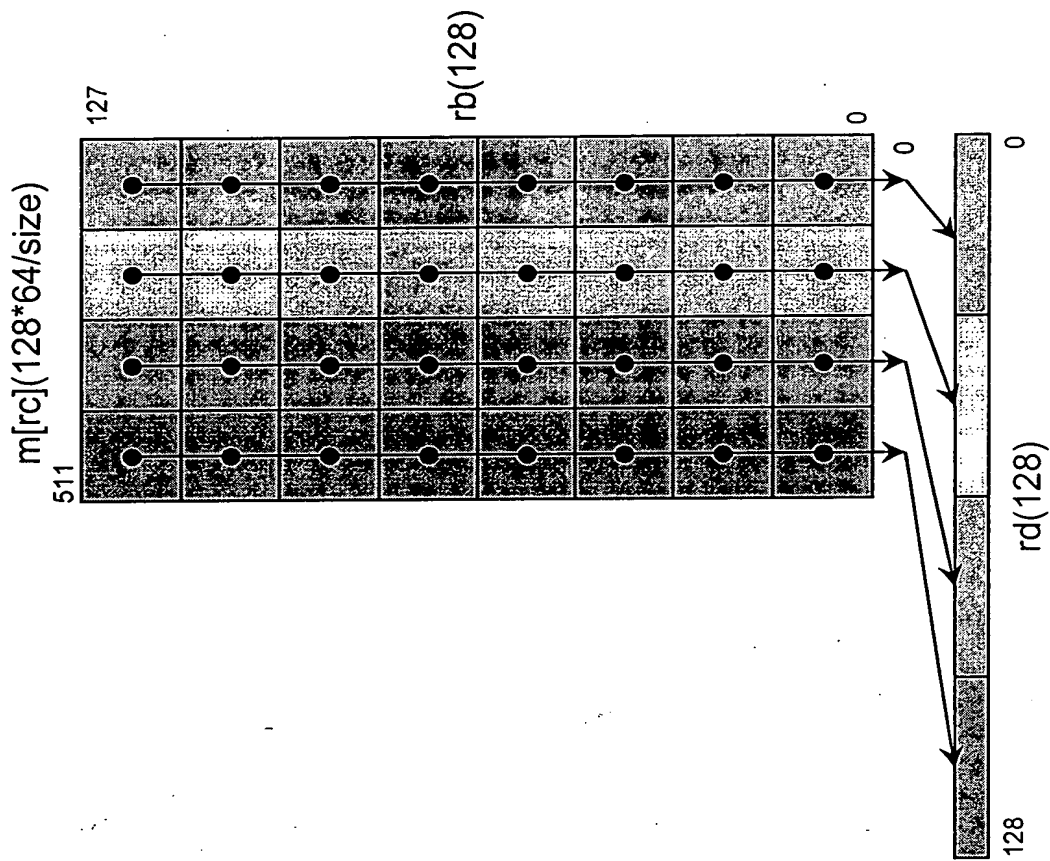


FIG. 2

# Wide multiply matrix

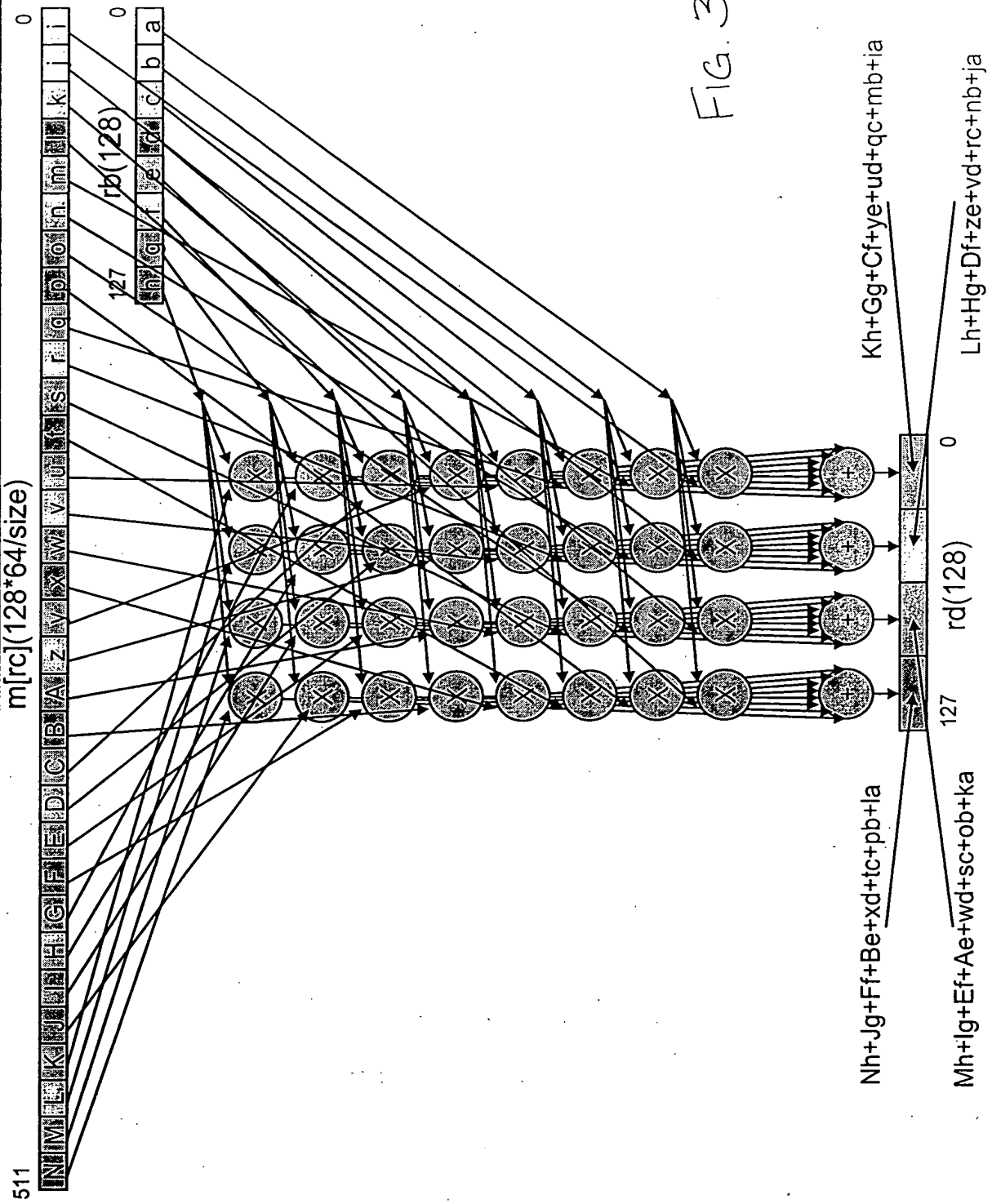
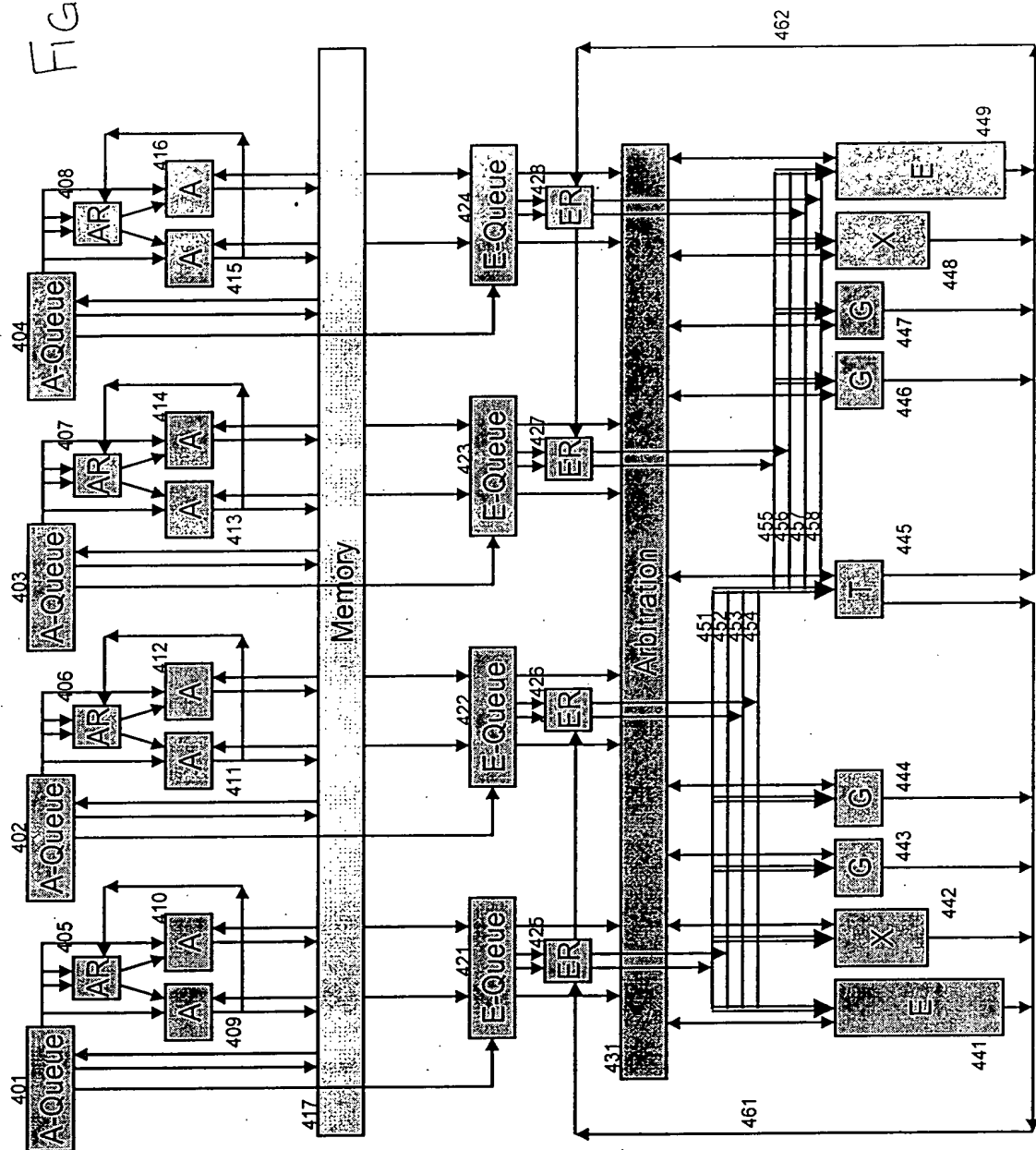


Fig. 3

# SMT + DAE

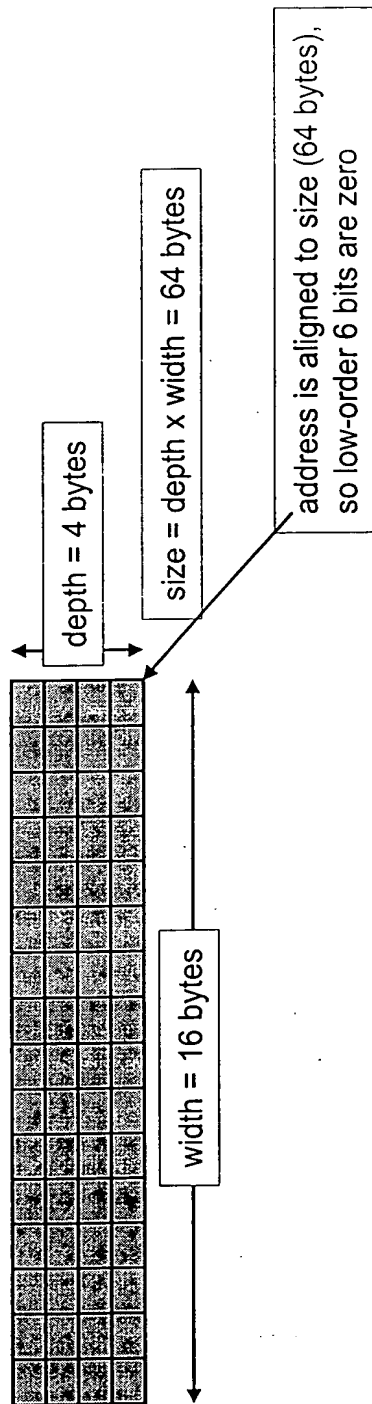
FIG. 4



# Wide operand specifier

■ specifier=address+(size/2)+(width/2)

FIG. 5



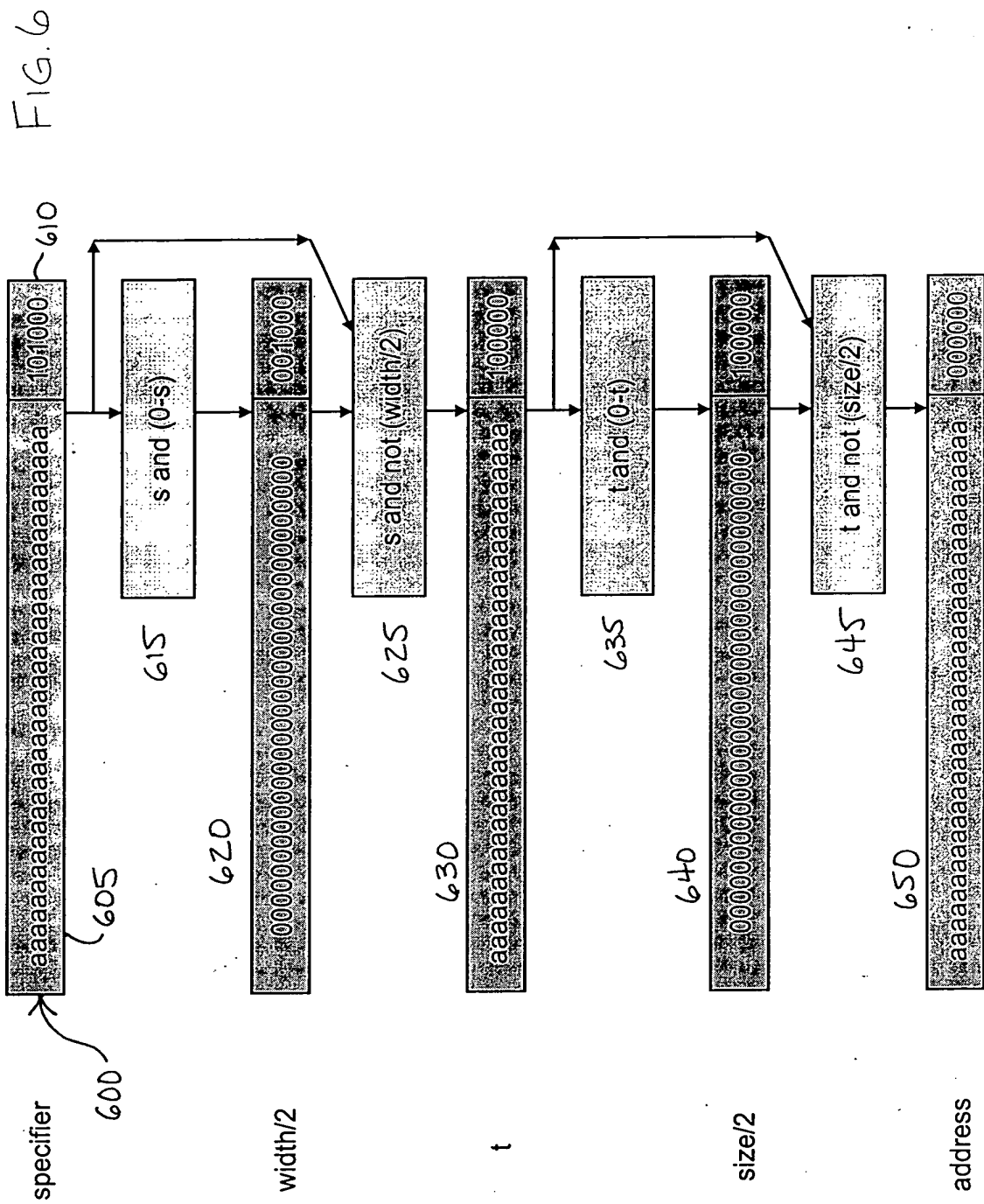
address  
aaaaaaaaaaaaaaaaaaaaaaaaaaaaaa 000000

size/2  
00000000000000000000000000000000 100000

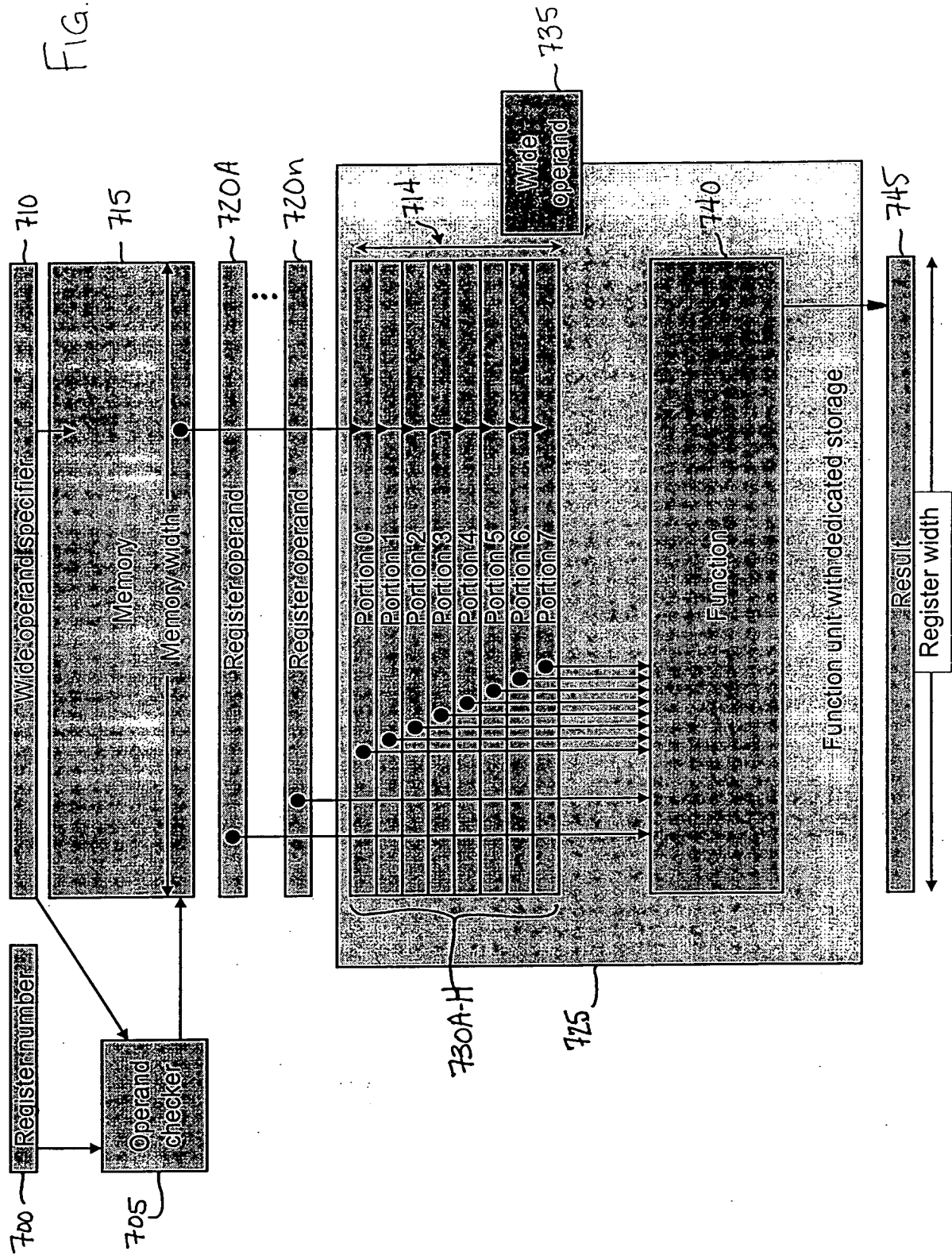
width/2  
00000000000000000000000000000000 001000

specifier  
500 → aaaaaaaaaaaaaaaaaaaaaaaaaaaaaaa 101000  
505

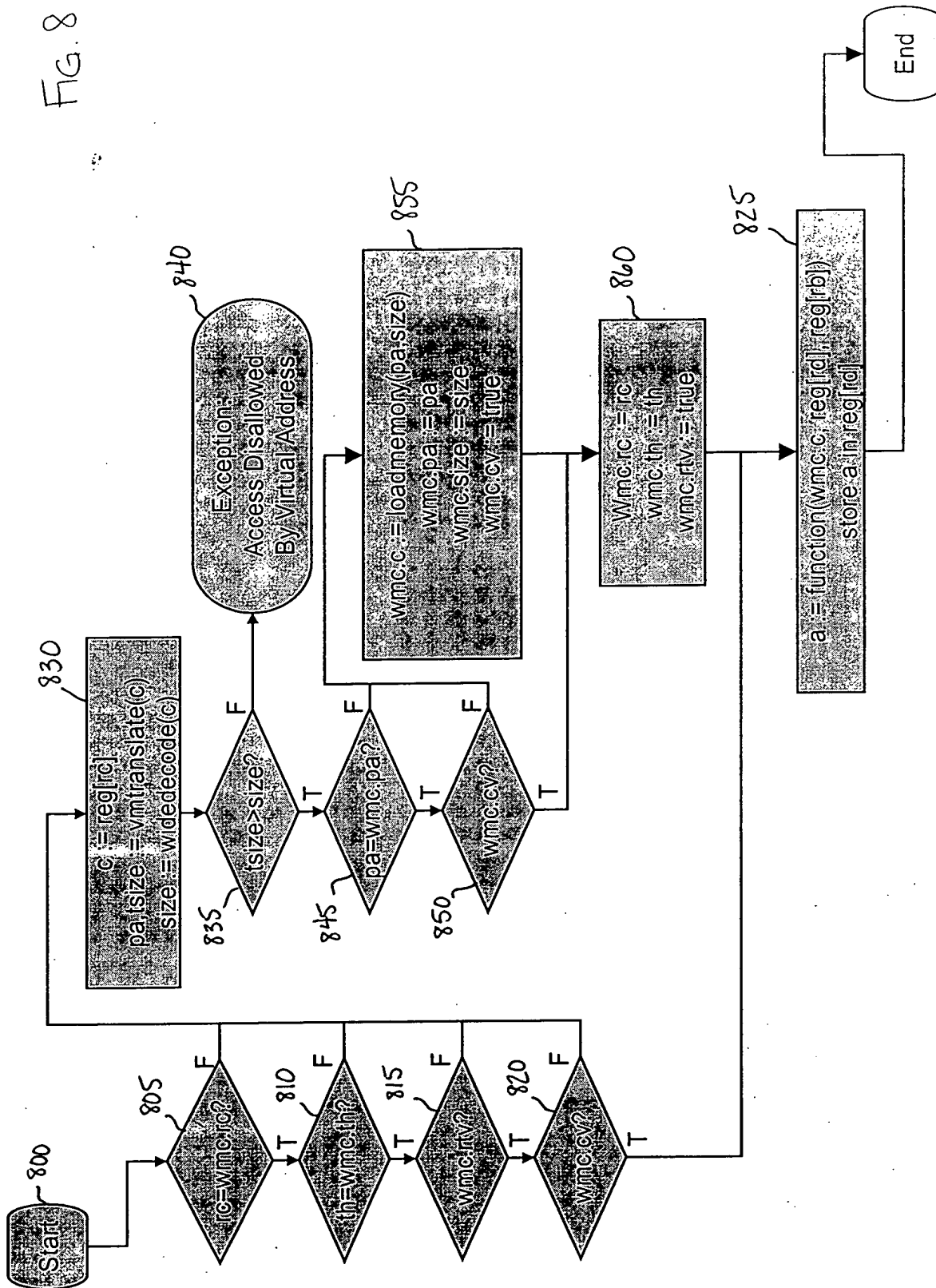
# Specifier decoding



# Wide function unit



# Wide MicroCache control

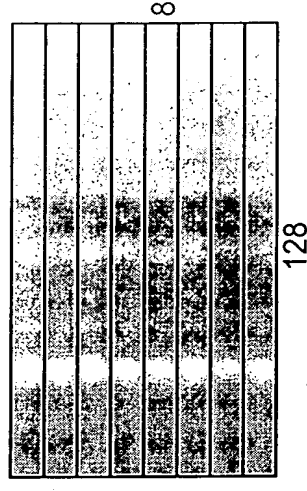




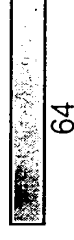
# Wide MicroCache data structures

FIG. 9

■ wmc.c contents



■ wmc.pa - physical address



■ wmc.size - size of contents



■ wmc.cv - contents valid



■ wmc.th - thread last used



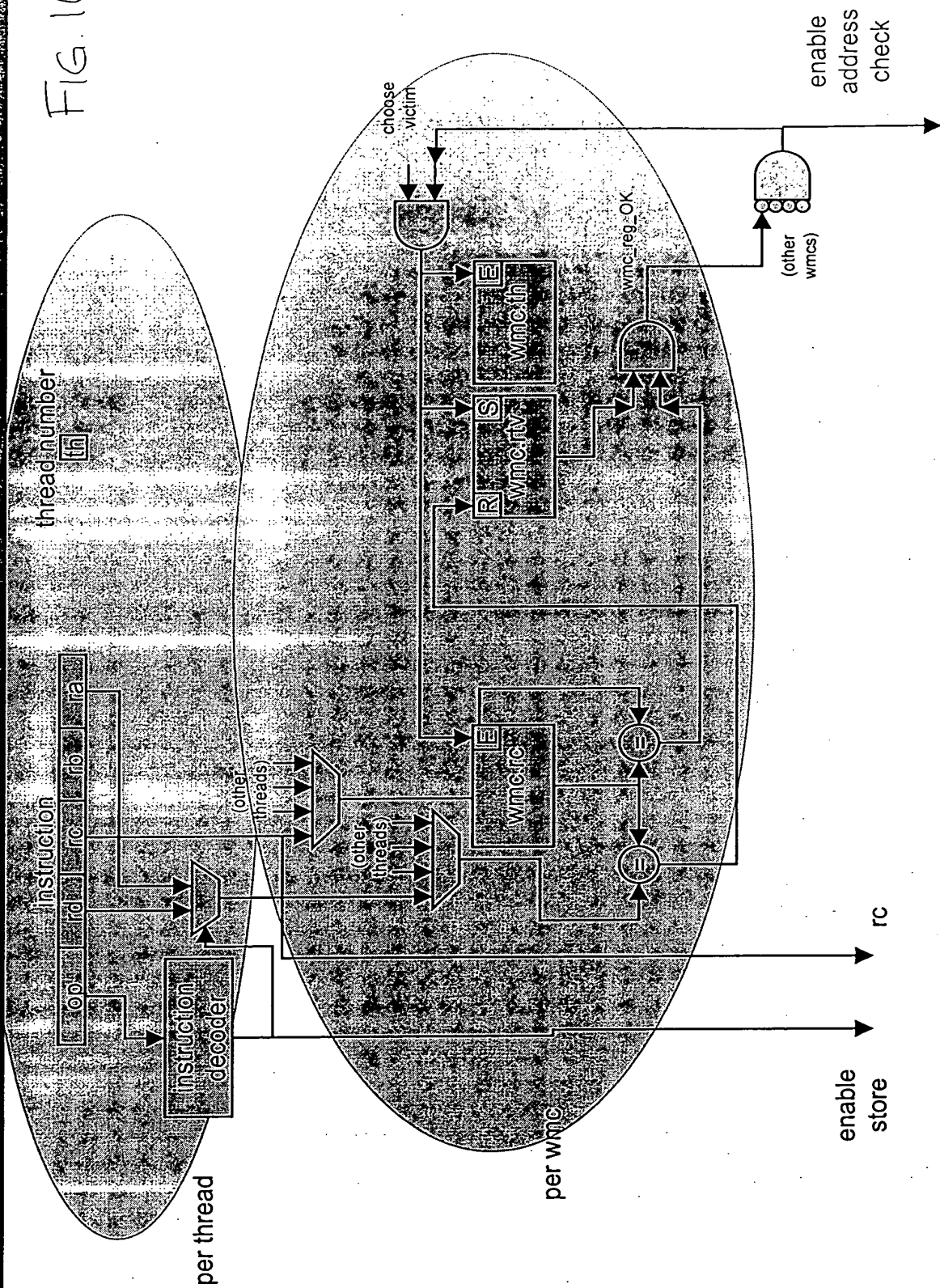
■ wmc.reg - register last used



■ wmc.rtv - register & thread valid



# Wide MicroCache control (1)



# Wide MicroCache control (2)

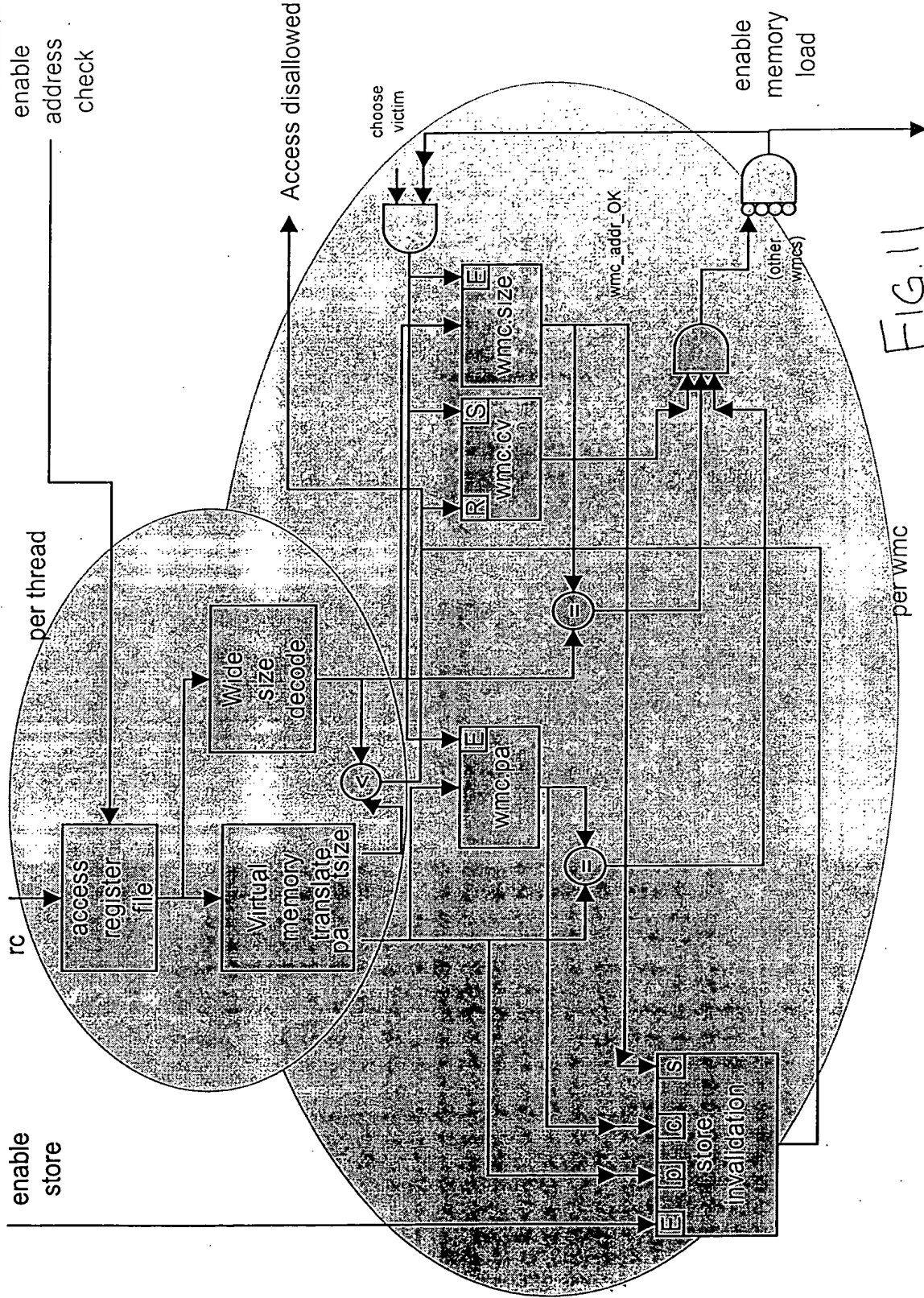


FIG. 11